

DOCUMENT RESUME

ED 210 485

CE 030 752

TITLE Adapting a Vocational Interest (in Audic-Visual Format) for Hispanic Use. Final Report, October 1, 1980 through June 30, 1981.

INSTITUTION Indiana Univ., South Bend. Indiana Career Resource Center.; Penn-Harris-Madison School Corp., Mishawaka, Ind.

SPONS AGENCY Department of Education, Washington, D.C.; Indiana State Dept. of Public Instruction, Indianapolis. Div. of Adult and Community Education.

PUB DATE 30 Jun 81

NOTE 53p.; Some appendix pages may be marginally legible.

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS *Audiovisual Aids; Audiovisual Instruction; *Career Education; Career Guidance; Filmstrips; *Hispanic Americans; *Instructional Materials; *Material Development; Measures (Individuals); Mexican Americans; *Occupational Information; Postsecondary Education; Secondary Education; Self Evaluation (Individuals); Spanish; Spanish Speaking; Vocational Education.

IDENTIFIERS Indiana

ABSTRACT In order to meet the career investigation needs of young adults of Hispanic origin, a project was conducted in Indiana to adapt an audiovisual vocational interest test (the Comparative Career Search) to the Spanish language and to adapt the visuals so that 50 percent of the work roles were of persons of Hispanic origin. A listing of the occupations presently included in the Comparative Career Search was developed and reviewed to determine the specific photographs which were necessary for achieving a 50 percent Hispanic imagery in the 72-item career interest test. Nominations and requests were conducted to gain photographic permission to obtain the job-specific shots. Laboratory preparation converted the pictures to correct-format slides, which, in turn, were developed into filmstrips for the final product. The instructions, scoring directions, and answer format were translated from English to Spanish and both printed and narrated to produce the answer sheet and taped directions. Following quantity production, a task force of Spanish speaking persons reviewed the instrument by completing the test. Their suggestions for improvement were gathered and are provided in the recommendations for further development and dissemination. (Author/KC)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED210485

FINAL REPORT

of

ADAPTING A VOCATIONAL INTEREST TEST
(IN AUDIO-VISUAL FORMAT) FOR
HISPANIC USE

PROJECT NUMBER: FY-81-8087-P

a special demonstration project

funded by a grant from the

Indiana Department of Public Instruction

Division of Adult and Community Education

under Section 310 of the Adult Education Act, P.L. 91-230,

as amended.

— Grantee: Penn-Harris-Madison School Corporation
Indiana Career Resource Center

Project Director: Gerald O. Dudley, PhD
Director

Date: June 30, 1981

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

L. Zeiter

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

The activity which is the subject of this report was supported in whole or in part by the U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education, and no official endorsement by the U.S. Department of Education should be inferred.

Abstract

of
Adapting A Vocational Interest
Test (in audio-visual format)
for Hispanic Use

Project #FY-81-8087-P

Agency: Penn-Harris-Madison School Corporation

Indiana Career Resource Center

Director: Gerald O. Dudley, PhD

Duration: October 1, 1980 through June 30, 1981

Objectives Accomplished:

- a. The Comparative Career Search vocational interest test filmstrip was adapted so that at least 50% of the work roles photographed were of Hispanic imagery.
- b. The Comparative Career Search answer sheet was converted from English to Spanish words and phrases.
- c. The Comparative Career Search taped narration of directions and scoring instructions was recorded in Hispanic dialect.
- d. The adapted version of the Comparative Career Search was field tested among Hispanic (Mexican) adult groups and comments and observations were recorded for use in later adaptations.
- e. Quantity copies of the Comparative Career Search (Hispanic) were produced for product dissemination purposes to the funding agency.

1. Components and quantity:

- (a) 15 copies of filmstrip/cassette format
- (b) 3 copies of slide/cassette format
- (c) 1 copy of video-tape format
- (d) 20 User's Handbooks in Spanish
- (e) 5,000 CCS (Hispanic) answer sheets

Procedures Used:

A listing of the occupations presently included in the Comparative Career Search was developed and reviewed to determine the specific photographs which were necessary for achieving a 50% Hispanic imagery in the 72-item career interest test. Nominations and requests were conducted to gain photographic permission to obtain the job-specific shots. Laboratory preparation converted the pictures to (correct-format) slides, which, in turn, were developed into filmstrips for the final product.

The instructions, scoring directions, and answer format were translated from English to Spanish and both printed and narrated to produce the answer sheet and taped directions.

Following quantity production, a task force of Spanish speaking individuals reviewed the instrument by completing the test. Their suggestions for improvement were gathered and are provided in the recommendations for further development and dissemination.

TABLE OF CONTENTS

Abstract	ii
Introduction	1
Design	5
Results	11
Conclusions/Recommendations	12
Appendices	16
A	16
B	26
C	40

ADAPTING A VOCATIONAL INTEREST TEST
(In Audio-Visual Format) FOR HISPANIC USE

Section I. Introduction

A. Purpose

Throughout the young adult years, most persons are in some relative degree of shaping their vocational destinies. It is during this period of life that they need help with the identification of those careers in which they might find satisfaction. The choice of a career of a broad spectrum of occupations in which satisfaction seems optimal, may be aided through the proper application of vocational interest measurement.

The Hispanic population is presently unable to participate in these activities because the language barrier makes it difficult for them to accurately respond to interest measurement - in its present format.

The rationale for using interest tests with young adults is:

- a) To allow them to perceive a large variety of work settings and focus on those options which seem most personally appropriate, and;
- b) To provide an organized description of information about themselves so that self-awareness, self-understanding, and future planning might be scientifically enhanced.

B. Specific Need

The opportunity for Spanish-speaking adults to utilize career counseling is limited because career and vocational interest tests are not available in a format that:

- 1) Uses the Spanish language in the directions for taking and interpreting the test,
- 2) Role-portrays Hispanic individuals in a variety of worker settings, or
- 3) Provides a method of relating interest test results to career and vocational planning.

This project will directly address those needs by adapting the Comparative Career Search to Spanish.

C. Documentation

A concensus among the results from needs assessments with adult basic education clients is their request for career planning assistance. Migrant populations who completed responses to a state questionnaire given to limited English speaking adults overwhelmingly ranked this need highest.

Vocational/counseling efforts among Hispanic populations are hindered by cultural expectations as well as by a lack of career planning resources in Spanish format. One type of valuable resource in the vocational counseling process is the vocational or career interest inventory.

The choice of careers is thought to be aided by the

use of properly interpreted interest test results.

The presently available instruments are inappropriate for use with limited English speaking adults because of: reading requirements, non-motivational formats, scoring and reporting delays, need for adult specialist monitoring, and improper validation.

On the one hand, needs assessment results report vocational guidance as important in the career planning of adults, but on the other hand persons who have close contact with Migrant and Hispanic adults report the language barrier as a reason for not being able to administer and interpret interest tests.

Faced with a similar problem with low motivated, disinterested-reader youth, the Indiana Career Resource Center conceptualized, developed, validated, and normed an interest test uniquely appropriate to that youth population.

Under its earlier development, a number of problems, common to other interest surveys, have been overcome through the validation and norming of the Comparative Career Search. The following problems and solutions show how this interest inventory has developed:

- a) Reading is a requisite to the completion of most interest inventories. Since the CCS gives directions through recorded audio tape, no reading is required.
- b) Motivation to take tests is not true of most tests. The CCS uses a color filmstrip format as well as popular musical background during

testing to overcome that handicap.

c) Most test scoring requires machine scoring and thus delays between taking and interpreting of the results. The CCS allow self-scoring through recorded directions and interpreted suggestions.

During the past 8 years, a majority of these needs have been satisfied, for an English speaking population, through the development, validation, and norming of the Comparative Career Search. This cassette/filmstrip measure of vocational interests requires no reading to complete. The pictures are projected on a viewing screen while a separate cassette provides directions and a paced, musical background. Choices are made by respondents on a separate answer form. The research and field testing has produced a test which is easy for adults to complete and provides an immediate profile of potential occupations or education majors to explore through career development activities.

The problem left to overcome with this project was one of converting both worker pictures, spoken directions, and answer sheet information from English to Spanish.

In addition, a Spanish language self-exploration booklet needed to be developed so that the interest test results might be used for a self-exploration career development process.

This project proposed to overcome the language problem by converting the pictures, directions, and

answer sheets of the Comparative Career Search to Spanish.

D. Target Population

The specific individuals for whom the products of this project should have greatest impact are Spanish-speaking adults. With the availability of this vocational interest test, adult education personnel will have a capability for assisting their adult students using interest test results.

E. Objectives

The following objectives and activities were proposed as a means to extend the usefulness of this instrument to the Spanish-speaking populations found in a variety of adult education programs in Indiana.

Four broad goals were pursued throughout the project year to insure a quality and usable product.

- a) To adapt avocational interest test (Comparative Career Search) filmstrip so that it portrays at least 50% of the work roles with Hispanic imagery.
- b) To translate the hand-scorable answer sheet from English to Spanish vocabulary.
- c) To re-record the script of spoken directions to Spanish from English.
- d) To field test the prototype using Hispanic adults in the South Bend area.

Section II. Design

A. Background

Since the need for career planning was evident among Spanish-speaking populations and since an adult-validated, youth normed instrument was available in English language format, this project sought to adapt the test to Spanish format.

The Comparative Career Search was validated on an adult population of workers (job incumbents) in 1976. The results indicated that the workers highest scores were in those work families in which they were performing and satisfied. 300 adults responded to the validation research and represented over 120 occupations. Further research using high school and young adult age individuals (over 5000) produced interpretive norms for the tests.

B. Conduct of Activities

Each of the activities planned for this 9-month project was designed to develop outcomes which related to the four project goals. This required the development of procedures which related to: picture portrayal of workers in various work stations, word translation from English to Spanish, field testing of prototype products, and reporting of progress and product attainment.

1) Picture Portrayal Methodology

a) The first task accomplished was to determine the specific work environments (already portrayed in the CCS) which should be portrayed with Hispanic featured job incumbents. 17 of the pictures were already of Hispanic

featured persons and 10 were of work environments in which the features of the worker were representative of any race. Thus 27 of the 132 pictures required were already of the type planned for the Hispanic version of the CCS. With a 50% rate expected for Hispanic workers, it was necessary to plan to change at least 39 more job incumbent pictures from Caucasian to Hispanic. (see appendix A)

The following pictures were planned for changing in this manner: XA, ZB, 2B, 4A, 4B, 5A, 6B, 7B, 8A, 8B, 10A, 10B, 11A, 12B, 13A, 14A, 15B, 16A, 19B, 22A, 22B, 24A, 27A, 29A, 32A, 34B, 37A, 37B, 41A, 42B, 43A, 44A, 44B, 45B, 53A, 62A, 64A, 66A, 68A, 68B, 70B, and 72B. These identified pictures were the 42 pictures for which specific workers were sought to photograph for the (Hispanic) CCS.

b) The second task which was accomplished was that of making contact with areas of the state where the likelihood of pocket populations of Migrants and settled-out Mexicans were living and working. The South Bend and Gary and communities were searched and contacts in those communities were able to provide arrangements whereby the 42 pictures were taken. In most cases at least 4 to 8 poses were provided to assure a useful picture which was similar to the one in the original CCS.

c). The new pictures were arranged in the order necessary for slide production and photographed to form the 2 x 2 color slides which make up the content of the test. As the slides were produced, they were shown individually to two career consultants, three Hispanic career educators and language teachers, and three directors of adult basic education. They suggested basic changes in the various slides to make them more visible to audiences. Most of the changes related to the density of color when projected on a screen. No negative comments were rendered so the slides were considered ready for filmstrip production.

To achieve this task, the Radmar Laboratories in Highland Park, Illinois were contacted to prepare a "release print" of various densities to be evaluated. Once one of the prints was determined to be of good quality, the production of filmstrips was authorized and achieved.

2). Word Translation Methodology

a) The first task accomplished in word translation was to seek out individuals who could provide accurate translation of the English words into Spanish. Requests for bids to accomplish the task were announced

and their submitted bids were inspected for cost efficiency and evidence of previous experience in similar ventures.

The consultant chosen to accomplish the task was provided with the English script, an English version of answer sheet words and a copy of the Handbook for test administrators from which Spanish versions were produced.

The consultant used a second opinion among the Hispanic community to assure correct translation prior to turning the completed copy over to this project. Copies of both English and Spanish scripts are included in Appendix B.

- b) The second task was one of selecting a narrator with Mexican dialect and with a radio quality voice to narrate the directions and instructions from the translated copy.

This required auditioning several persons who indicated an interest in this consulting task. From the taped result, a group of three audio-visual specialists selected the person who did the narration.

- c) The taped narration was submitted to Larry Stucker Productions, Inc. in South Bend where a studio quality tape, including both

narration and music, was prepared. The tape was evaluated in concert with the color slides earlier produced to make certain that the timing and pacing of both were synchronized.

d) With the front and reverse side of the test score sheet translated to Spanish, a rough draft of the format was submitted to NCS Data Forms of Lancaster, Pennsylvania for preparation of a proof copy of the answer sheet.

Following the inspection and proof reading of the answer sheet, quantity copies were requested. Copies of both the English and Spanish versions of the answer sheet are appended as Appendix C.

3) Field Test Methodology

Prototype copies of the Comparative Career Search were provided to facilitators in two Hispanic related projects in Northern Indiana. La Casa, Inc. in South Bend gathered verbal responses from both staff members of the organization and a small group of adults representing maintenance workers and housewives.

The Latin American Family Education Program, Inc. of Gary, Indiana provided a field test site where faculty, young and older adult Hispanic students voluntarily completed the instrument and made suggestions.

In both sites, the test administrator was requested to follow the directions as closely as possible, to supplement the instructions where necessary and to observe the difficulties and successes achieved by the test takers.

At the end of the session they were instructed to gather suggestions for improvement of the directions, to solicit whether the clients felt satisfied with the test results, and to request comments about the perceived quality of the instrument.

From these comments and observations it is possible to prepare a list of recommendations for making the product more effective in later versions of the Comparative Career Search.

Section III. Results

Two types of results emerged from this project: the products which have utility for assessing the vocational interests of Hispanic adults, and the collection of reactions, observations, and suggested changes resulting from advisory group and field test activities.

A.. Products developed by the project.

The complete set of multiple products which resulted from this project have been made available to the Division of Adult and Community Education in Indianapolis.

These products are:

- a) 15 copies of the Comparative Career Search (Hispanic) in filmstrip/cassette format.

Each of the copies is contained in a plastic container suitable for shelving or mailing.

Included also in the container is a single copy of the User's Handbook in Spanish format.

- b) 3 copies of the Comparative Career Search (Hispanic) in slide/cassette format. Each of the copies is contained in a dust-proof container suitable for shelving or mailing. Included also in the container is a single copy of the User's Handbook in Spanish format.
- c) 1 copy of the Comparative Career Search (Hispanic) in videotape format. This copy is contained in a dust-proof container suitable for shelving or mailing. Included also with the container is a single copy of the User's Handbook in Spanish format.
- d) 5,000 (or fewer, since some were used in field tests) answer sheets suitable for being used with the above test formats. (Appendix C contains a copy of this form).

B. Field Test Results

During field testing, two locations provided reactions to the developing and completed test forms. One of these locations was La Causa, Inc. of South Bend and the other was Latin American Family Education Program, Inc. of Gary, Indiana.

As the project developed they were willing to provide staff time to review the pictures, script, and formatting. They invited youth and adults to be present for the re-

view, but were not totally successful in getting suggestions which would be technically beneficial.

Both of the projects did take a copy of the finished product and used it with Spanish-speaking adults in families who were of Latino descent. The procedure suggested for obtaining feedback was as follows: First, give a brief explanation of the nature and use of interest testing; second, administer the test as developed and provide only support and problem resolution comments; third, de-brief the participants regarding their feelings and satisfaction with the results.

In both field test centers combined, a total of 52 persons of Latin Heritage took the Comparative Career Search in small group settings. The age range of the clients was from 17 to 72 with the majority in the thirties. Many of the participants were housewives and most were from semi-skilled employment settings.

The facilitators at both sites were proficient in Spanish and were competently trained in administering the survey. They were requested to observe and take notes for later review.

From this set of notes it was possible to draw several conclusions and make recommendations for further revision of the instrument.

Section IV. Conclusions/Recommendations

A. Conclusions

There was general agreement from all participants regarding several important aspects of vocational interest

measurement:

- 1) First, all of the persons who were involved in the test taking experience were pleased to be able to have information of this type about themselves. They had never taken a test of this nature and were totally satisfied that the results would be useful to them in future work considerations.
- 2) Second, up to the time of this test administration all of the subjects had considered testing as having right or wrong answers, and had some difficulty being spontaneous in their answers. They remained dependent on the facilitator for suggestions and clues. All of the clients had a test set for providing maximum performance and were totally unaccustomed to providing habitual performance responses.
- 3) Third, the photographs of job incumbents used in the instrument were seen as useful by the clients and facilitators for broadening career awareness. Discussion within the group was prompted by the pictures and a desire to find out what the person's work rôle was. This sometimes caused much more than the allowed time limit to ensue.

B. Recommendations

Several specific recommendations have been made which should be accommodated in any updates or continued

production of the product. These suggestions came from both the facilitators and the clients.

- 1) ESL participants need to be made aware of the nature of the instrument at the beginning of any session. This should include instructions that every item requires one of three choices-- no blanks allowed. Also the instructions should stress a test set that there are no right or wrong answers and that their results will be compared with persons in the job--for feedback purposes.

To accomplish this task it was recommended that an advance organizer be developed which would have practice sheets to complete before handing out the CCS answer sheets.

- 2) It was recommended that some of the photographs used in the directions for test taking and those for test scoring lack consistency. If directions for totalling A responses are varied when totalling B's or ?'s the client is confused. Since ESL participants are used to routine and step-by-step procedures they become somewhat confused by variety in directions.

To accomplish this task, it is recommended that any future photographs of the answer sheet be carefully staged so that they do not include extraneous materials not used in the narrative statements and instructions.

3) It was recommended that the tape be re-narrated with a person (perhaps an evangelist) who had excitement in their voice, rather than clarity in their speech and enunciation.

To accomplish this task would require auditioning of a number of talents for sample tapes which could be evaluated by a client group.

4) It was recommended that, in addition to asking the test taker to consider the occupations on the reverse side of the answer sheet, more comments should be given to the fields of study related to those jobs. The rationale for this comes from two conditions. First, education is of prime consideration because they see it as a way to advance in life. Second, many of the participants are housewives and are content to remain so. They have little interest in exploring new jobs. They are excited however in the discovery of areas in which they can gain new skills and knowledge helpful to their duties and pleasures.

The majority of the recommendations are of a technical nature relating to camera positioning, voice quality, and instructional technology in practice efforts. With these changes accomplished in future versions of the instrument, it is expected that the ESL classes throughout Indiana could easily take advantage of the test and could routinely assist students in interest assessment and career planning.

APPENDIX A

The enclosed list includes all of the occupations represented in the English version of the Comparative Career Search. The headings for the list are as follows: # means the number assigned to that picture in the original test; title means the job title which was validated to represent the photograph it depicts; D.O.T. means the Dictionary of Occupational Titles classification of the title; M/F/N means whether the incumbent was male, female or nondescript; C/H/B/N depicts whether the original photograph was of Caucasian, Hispanic, Black, or nondescript feature; H represents the Holland-type classification of the job.

#	TITLE	D.O.T.	M/F	C/H/B/N	H	COMMENTS
XA	Horticultural-Speciality Grower or Plant Propagator	405.161-018 or 405.361-010	M	C	I	
XB	Salesperson, Furniture	270.357-030	F	C	E	
YA	Legal Secretary	201.362-010	M	B	C	
YB	Sculptor, Clay	144.061-018	F	C	A	
ZA	Manager, Service Department	187.167-142	F	C	R	
ZB	General Practitioner	070.010-022	M	C	S	
1A	Secretary or Collator Operator	201.362-030 or 208.685-010	M	C	C	
1B	Salesperson, Women's Apparel and Accessories	261.357-066	F	C	E	
2A	Proofreader	209.387-030	F	C	C	
2B	Meteorologist or Weather	025.062-010	M	C	S	
3A	Audit Clerk	210.382-010	F	H	E	
3B	Cosmetic Demonstrator	297.354-010	M	C	A	
4A	Reservation Agent	238.367-018	F	C	E	
4B	Chemistry Technologist	078.261-010	F	C	I	
5A	Instructor, Sports	153.227-018	F	C	S	
5B	Sewing Machine Operator	783.682-010	F	H	A	
6A	Airplane Flight Attendant	352.367-010	F	H	S	
6B	Land Surveyor	018.167-018	M	C	R	

7A Musician Instrumental	152.041-010	M	C	A
7B Animal Caretaker	410.674-010	F	C	I
8A Clothes Designer	142.061-018	F	C	A
8B General Clerk or File Clerk	209.562-010 or 206.362-010	F	C	C
9A Cytotechnologist	078.261-010	F	H	I
9B Instrument Repairer	722.281-010	M	H	R
10A Chemist	022.061-010	M	C	I
10B Computer-Laboratory Technician	003.161-014	M	C	C
11A Tune-Up Mechanic	620.281-066	M	C	R
11B Ticket Agent	238.367-026	F	C	E
12A Construction Worker	869.664-014	M	C	R
12B Driving Instructor	099.223-010	M	C	S
13A Bindery Worker	653.685-010	F	C	C
13B Manicurist	331.174-010	F	N	S
14A Accountant	160.167-014	F	C	C
14B Painter	144.061-010	M	H	A
15A Sales Representative, Office Machines	275.357-034	M	C	E
15B Aeronautical Engineer	002.061-014	M	C	I

16A Salesperson Automobiles	273.353-010	M	C	E
16B Painter	970.381-026	M	C	A
17A				S
17B				R
18A Magistrate	111.107-014	M	C	S
18B Pharmacist	074.161-010	F	H	I
19A Alterations, Tailor	785.261-010	F	H	A
19B Keypunch Operator	203.582-030	M	C	C
20A Quick Sketch Artist	149.041-010	M	H	A
20B Shoe Repairer	365.361-014	M	B	R
21A Dentist	092.101-010	M	B	I
21B Architect	001.061-010	M	E	C
22A Cashier Clerical	211.362-010	F	C	I
22B Data-Coder Operator	203.582-026	F	C	E
23A Farm Worker, General	421.161-010	N	N	R
23B Airline Security Representative	372.667-010	F	C	S
24A Forest Ecologist	040.061-030	M	C	R
24B Supervisor, Safety Deposit	186.137-010	M	C	E

25A Teller	211.362-078	F	C	C
25B Sculptor	144.061-018	M	B	A
26A Operations Officer	186.167-050	F	C	C
26B Psychologist Experimental	045.061-018	M	H	I
27A Salesperson, General Merchandise	279.357-054	M	C	E
27B Drafter, Architectural	001.261-010	M	C	A
28A Insurance Clerk	205.567-010	F	C	E
28B Station Installer and Repairer	822.261-022	M	B	R
29A Waiter/Waitress Captain	311.137-018	M	C	S
29B Electrical Repairer	825.281-010	F	C	
30A Teacher, Secondary School	091.227-010	F	B	S
30B Shorthand Reporter	202.362-010	M	C	C
31A Sculptor	144.061-018	M	B	A
31B Cook Helper, Pastry	313.687-010	M	H	R
32A Teacher, Art	149.021-010	M	C	A
32B Clerk Typist	203.362-010	M	B	C
33A Anthropologist	055.067-010	F	H	I
33B Air-Traffic Control Spec., Tower	193.162-018	M	C	

34A	Material Scientist	029.081-014	M	C	I
34B	Host/Hostess Restaurant	310.137-010	M	C	S
35A	Utility-Tractor Operator	850.683-046	N	N	R
35B	Librarian	100.127-014	F	C	E
36A			M	C	R
36B			F	H	S
37A	Adding Machine Operator	216.482-014	F	C	C
37B	Data Examination Clerk	209.387-022	M	C	I
38A			F	C	C
38B			F	C	A
39A	Securities Trader	162.157-042	M	C	E
39B	Trawl Net Fisher	441.684-010	N	N	R
40A	Salesperson Sporting Goods	277.357-058	F	C	E
40B	Office Machine Supervisor	633.281-018	F	C	I
41A	Respiratory Therapist	079.361-010	F	C	S
41B	Bookkeeping-Machine Operator	210.382-022	F	N	C
42A	Teacher, Secondary School	091.227-010	M	C	S
42B	Driver, Sales Route	292.353-010	F	C	R

43A	Photographer, Still	143.062-030	M	C	A
43B	Receptionist	237.367-038	F	H	C
44A	Camera Operator Television	146.062-022	M	B	A
44B	Sales Agent, Real Estate	250.357-018	M	C	E
45A	Hydraulic Engineer	005.061-018	M	C	I
45B	Instructor, Sports	153.227-018	M	C	S
46A					E
46B					R
47A					S
47B					C
48A	Welding Technician	011.261-014	F	H	R
48B	Dramatic Coach	150.027-010	M	H	A
49A					A
49B					
50A	Secretary	201.362-030	M	H	C
50B	Drafter, Structural	005.281-014	F	C	R
51A	Meat Counter Clerk	290.477-018	M	C	E
51B	Medical Assistant	079.367-010	M	C	I

52A	Sales Representative, Recreation and Sporting Goods	277.357-026	F	C	E
52B	Medical Records Technician	079.367-014	N	N	C
53A	Counselor	045.107-010	F	B	S
53B	Locomotive Engineer	910.363-014	N	N	R
54A	Recreation Leader	195.227-014	M	C	S
54B	Secretary	201.362-030	F	N	C
55A					A
55B					E
56A	Instructor, Dancing	151.027-014	F	C	A
56B	Hair Stylist	332.271-018	M	C	S
57A					I
57B					E
58A	Tester Regulator	710.387-010	M	C	I
58B	Athletic Trainer	153.224-010	F	C	S
59A	Structural-Steel Worker	801.361-014	M	C	R
59B	Floral Designer	142.081-010	M	C	A
60A	Blacksmith	610.381-010	M	C	R
60B	Podiatrist	079.101-022	M	C	I

61A	Tax Accountant	160.162-010	M	C	C
61B	Farmworker, Livestock	410.664-010	M	N	B
62A	Cashier, Checker	211.462-014	M	C	C
62B	Dental, Hygienist	078.361-010	F	C	I
63A	Salesperson, Furniture	270.357-030	M	C	E
63B	Bookkeeping Machine Operator	210.382-022	F	C	C
64A	Salesperson Men's & Boy's Clothing	261.357-050	F	C	E
64B	Fire Fighter, Crash, Fire & Rescue	373.663-010	F	C	R
65A	Emergency Medical Tech- nician	079.374-010	M	C	S
65B	Editor Publications	132.037-022	M	C	C
66A	Waiter/Waitress, Club	352.677-014	F	C	S
66B	Salesperson, Household Appliances	270.357-034	M	C	E
67A	Radio Announcer		M	B	A
67B	Minister		M	C	S
68A	Reservation Clerk	238.362-010	F	C	E
68B	Painter, Hand	970.381-022	F	C	A

69A	Electronic Technician	003.161-014	F	C	I
69B	Veterinarian	073.101-010	F	C	S
70A	State Highway Police Officer	375.263-018	M	C	I
70B	Choral Director	152.047-010	M	C	A
71A	Log Loader	921.687-022	F	C	R
71B	Electrical-Equipment Tester	729.381-010	F	C	I
72A	Bricklayer	861.381-018	F	C	R
72B	Salesperson, Photographic Supplies, and Equipment	277.357-050	M	C	A

APPENDIX B

The enclosed scripts are English and Spanish words and phrases accompanying the sequential frames or slides in the Comparative Career Search vocational interest test. The numbers on the left are the slide or frame numbers of the test.

1. No Sound
2. No Sound
3. No Sound
4.This is a survey to assist you in discovering those jobs that interest you most. Your answer sheet has seventy-two (72) spaces for you to ~~mark~~. (Signal)
5. The film shows people at work. The two photographs are of persons doing different jobs. The drawings beside them are clues to the tasks they are performing. (Signal)
6. During the survey, you will be asked to select your preference for the upper drawing and photograph - labeled A,or the lower pair - labeled B. (Signal)
7. You will then mark your answer to show the choice of work you prefer - that is, either A or B. If you cannot decide, blacken in the (?) response space....(Signal)
8. The pictures show people at work. Your choice of A or B should not be influenced by the sex of the persons in the pictures but by the work they are doing. (Signal)
9. On the left side of your answer sheet is an example box. Find that box, for in a few moments you will be using it to ~~mark~~ your preference for three sample pictures....(Signal)

10. Remember, if you prefer the kind of work pictured in A, blacken the response space below the letter A. If you prefer the kind of work pictured in B, blacken the B response space. If you have difficulty making a choice, you may blacken the (?) space. Mark in the example box only one response for each picture.

You will have about 10 seconds to mark your choice for each of the next three example pictures. (Signal) Mark Now!

11. (Bring up music) (After 10 seconds, signal)

12. (Continue music) (Signal after 10 seconds)

13. (Continue 10 seconds of music, then fade....) Do you have any questions? If you do, stop the sound until your questions are answered. (Pause 4 seconds). Make certain the number shown in the picture is the same as the response number you are marking on your answer sheet. If there are no questions, begin marking your responses to the next 72 pictures. (Signal)

14-

85. Begin (Continuous music starts with pulse signals every 11 seconds).

86. You are now ready to figure your results from the Comparative Career Search. When this scoring process is completed, you will have seven (7) scores -- six (6) will be row totals and one (1) will be the total number of (?) responses. When you hear this signal...Beep...you should stop the sound and complete the step; then restart it for further directions...(Signal)

87. To begin, count the number of A responses you darkened across the top two rows on your answer sheet.....Write that number in the box with the arrow pointing toward it and the A above it.....A responses only, not B responses...Beep...(Signal)

88. Continue, by counting the number of A responses you darkened in the five (5) remaining double rows.....Write each two row total in the box that the arrows point to...Beep...(Signal)

89. Next, you are to count the number of B responses you darkened. This is done differently from your A count.....To begin, count the number of B responses you darkened down the first column on your answer sheet.....Write that number in the box with the B beside it at the bottom of the answer sheet.....B responses only, not A responses...Beep...(Signal)

90. Continue, by counting the number of B responses you darkened in the next five (5) columns.....Write each column total in the box that the arrows point to at the bottom of the page... Beep...The B responses in the last column are not counted, so no box has been provided for that B total....(Signal)

91. Next, the A and B box scores are to be added together..... Look at the example on the screen.....The number you wrote in the A box with the Roman Numeral I beside it should be transferred to the space below the B box with the same Roman Numeral.....Then add the two numbers together to get the Roman Numeral I total score...Beep...(Signal)

92. Now, Continue to transfer each A total to the appropriate space and add it to the B total with the same Roman Numeral beside it...Beep...(Signal)

93. To determine your total number of (?) responses, count each (?) you darkened across each row.....Place these totals in the arrow boxes at the left of each row.....(?) responses only...Beep...(Signal)

94. Add all the (?) arrow box totals together and write that ~~sum~~ in the (?) total box at the bottom of the page...Beep ... (Signal)

95. Turn your answer sheet over.....Look at the example on the screen.....In the circled area are seven (7) boxes, six (6) Roman Numeral boxes and one (1) question mark box.....(Signal)

96. Transfer your total scores from side one (1) to these seven (7) boxes....Please write your numbers so they cover the Roman Numerals inside the boxes...Beep...(Signal)

97. The seven (7) box scores you just transferred can now be interpreted, using either the upper or lower graphs on side two. You should mark an X across the graph you will not be using. The upper graph is appropriate if you are female and the lower one, if male. (Signal)

98. Each bar graph is a three-sectioned picture that compares your scores with those made by others who took this survey.

Start your comparisons with the bar graph that has the (?) above it....Look at your own (?) box score....If you are female and your (?) score is 32 or more or if you are male and your score is 37 or more, you should be cautious about the value you place on the remaining survey results....

Being undecided is a characteristic of many persons who are still exploring their life....If you score in the lower two ranges, you have reason to place more importance on your results....(Signal)

99. Each of your other six box scores has a bar graph for you to compare your results with the results of others....(Signal)
100. To determine the bar graph range for your six remaining scores, study this example....The box score for Roman Numeral I is six (6). This number six can also be found on the total score numbers on the left side of the answer sheet. By drawing an arrow from this six (6) into the bar graph above Roman Numeral I we hit a section of the bar graph with the letter B on it...(Signal)
101. In the same way you can discover the section and letter for each of your six (6) box scores. Now mark your own...Beep... If any number seems to be between two sections, use the upper one...(Signal)
102. After you have discovered your six (6) contrast letter codes, transfer each letter to the appropriate blank circle on the top part of your answer sheet. There is one blank circle for each of your six letter codes... Beep...(Signal)

103. A codes represent the areas of your strongest interests.... Take some time now and study the occupations and fields of study under those A codes...Beep...(Signal)

104. Focus your attention back on the screen....The persons who work at occupations listed in each column have career interests that are similar. Their vocational personalities are suggested by the cluster names given to each group of workers. In most cases, you will find that your vocational personality is a combination of more than one cluster...Beep...(Signal)

105. Turn your answer sheet back to side one...On the upper part of your answer sheet, find the six (6) boxes shown in this example....This is a scale to help you determine the consistency of your choices for pictures repeated in the survey....(Signal)

106. Compare your responses to pictures (5) and (71)....Are your responses the same or are they different?....(Signal)

107. If they are the same, place a check mark inside the (5) and (71) square....If your responses are different, leave the square blank....(Signal)

108. On each side of the remaining five (5) squares are the numbers: of the pictures you should now compare in the same way... Beep...The fewer check marks you have, the greater is the reliability of your test results....(Signal).

109. CREDITS

1. Sin Sonido
2. Sin Sonido
3. Sin Sonido
4. Esto es una encuesta para ayudarlo a descubrir aquellos trabajos que mas le interesan. Su hoja de contestaciones contiene setenta y dos (72) espacios donde usted marcará su respuesta. (Señal)
5. La película muestra personas en sus trabajos. Dos de las fotografías son de personal ejecutando diferentes trabajos. Los dibujos contiguos son guías para las tareas que llevan a cabo. (Señal)
6. Durante la encuesta se le pedirá que indique su preferencia entre los dibujos y las fotos superiores - tituladas A, ... o la paraje inferior - titulada B. (Señal)
7. Luego marcará aquella contestación que muestra la alternativa de trabajo que usted prefiere - es decir, A o B. Si no puede decidir, oscurezca el espacio de la respuesta (?). (Señal)
8. Los retratos muestran personas trabajando. Su selección sea A o B no debe estar influenciada por el sexo de las personas en los retratos, si no por el trabajo que realizan. (Señal)
9. En el lado izquierdo de la hoja de contestaciones hay un encasillado de ejemplo. En unos momentos estará usted usando este encasillado de ejemplo para indicar su preferencia entre

los tres retratos de muestra....(Señal)

10. Recuerde, si usted prefiere el tipo de trabajo mostrado en A, oscurezca el espacio de respuesta debajo de la letra A. Si prefiere el tipo de trabajo mostrado en B, oscurezca el espacio de respuesta B. Si no puede decidir, oscurezca el espacio (?). Marque solamente una respuesta por cada retrato.

Usted tendrá alrededor de 10 segundos para marcar su decisión para cada uno de los siguientes tres retratos de ejemplo, (Señal) Marque ahora!

11. (Presentación de música) (Luego de 10 segundos, señal)

12. (Música continua) (Señal luego de 10 segundos)

13. (Continúan 10 segundos de música, luego se desvanece....)

Tiene alguna pregunta? Si tiene alguna detenga el sonido hasta que su pregunta sea contestada. (Pausa de 4 segundos).

Asegúrese de que el número mostrado en el retrato es igual al número de respuesta que usted está marcando en su hoja de contestaciones. Si no hay preguntas comience a marcar sus respuestas en los próximos 72 retratos. (Señal)

14-

85. Comience (Comienza música continua con señales ritmicas cada 11 segundos)

86. Ya está usted Listo para calcular los resultados del "Comparative Career Search" o búsqueda de carreras por comparación. Cuando este proceso de puntajes sea completado, usted tendrá

..(7) puntajes -- seis (6) seran totales de las filas y uno (1) sera el numero total de respuestas (?). Cuando escuche esta señal...Bip...Usted debera detener el sonido y completar el paso indicado; entonces conience y saga las instrucciones... (Señal)

87. Para comenzar, cuente el numero de respuestas A que usted oscurecio a traves de las dos filas superiores en su hoja de contestaciones....Escriba ese numero en el encasillado señalado por la flecha que apunta hacia el; y con la A sobre el mismo....Respuestas A solamente; respuestas B no...Bip ... (Señal)

88. Continue contando el numero de respuestas A que usted oscurecio en las restantes cinco (5) filas dobles....Escriba cada dos filas el total en el encasillado que la flecha apunta...Bip ... (Señal)

89. A continuacion, debera usted contar el numero de respuestas B que oscurecio. Esto se hace de forma diferente al conteo de respuestas A...Para Empezar, cuente el numero de respuestas B que oscurecio debajo de la primera columna de su hoja de contestaciones...Escriba dicho numero en el encasillado que tiene la B al lado, debajo de la hoja de contestaciones...Solo las respuestas B, las respuestas A no...Bip... (Señal)

90. Continue contando el numero de respuestas B que usted oscurecio en las proximas (5) columnas...Escriba el total de cada columna en el encasillado en que la flecha

apunta, es decir en la parte inferior de la pagina...Bip
 ...las respuestas B en la ultima columna no se cuentan, por
 lo tanto no se provee un encasillado para el numero total
 de B... (Señal).

91. A continuacion, las puntuaciones de los encasillados A y B
se sumaran juntos...Observe el ejemplo en la pantalla...

El numero que usted escribio en el encasillado A con un
 numeral romano I al lado, debe ser transferido al espacio
 debajo del encasillado B con el numeral romano...Sume ambos
 numeros para conseguir la puntuacion total del numero
 romano I...Bip... (Señal)

92. Ahora continue transfiriendo cada total de A al espacio
 apropiado y sumelo al total de B con el numeral romano al
 lado...Bip... (Señal)

93. Para determinar el numero total de respuestas (?), cuente
 cada una de las respuestas (?) que obscurecio a traves de
 cada filá...coloque estos totales en los encasillados con
 flechas, al lado izquierdo de cada fila...Las respuestas
 (?) solamente...Bip... (Señal)

94. Sume todos los totales de los encasillados con flechas (?)
 y escriba dicha suma en el encasillado total de (?) al fondo
 de la pagina...Bip... (Señal)

95. Voltee su hoja de contestaciones...Observe el ejemplo en
 la pantalla...En el area circulada hay siete (7) encasillados
 de numerales romanos y un (1) encasillado de signo de interro-
 gacion... (Señal)

96. Tranfiera su puntuacion total del lado uno (1) a estos siete (7), encasillados... por favor escriba sus numeros tal que cubran los numerales romanos dentro de los encasillados...

Bip... (Señal)

97. Los siete (7) encasillados que usted acaba de transferir, pueden ahora ser interpretados, usando las graficas superiores o las inferiores del lado numero dos. Usted debera marcar una X a traves de la grafica que no usara. La grafica superior es la apropiada si usted es mujer, y la inferior si usted es hombre. (Señal)

98. Cada grafica de barra es un retrato tri-seccionado que compara sus puntuajes con aquellos obtenidos por otras personas que han tomado esta encuesta. Comience sus comparaciones con la grafica que tiene los signos de interrogacion (?) sobre ella... Mire a su propio encasillado de (?)... Si usted es mujer y su puntuacion en (?) es de 32 o mas, o si usted es hombre y su puntuacion en (?) es de 37 o mas, usted debera tener mucho cuidado acerca del valor que dara a los restantes resultados.... Estar indeciso es una caracteristica de muchas personas que estan aun explorando sus vidas... Si su puntuacion cae en los dos rangos inferiores, usted tiene razones para poner mas importancia a sus resultados... (Señal)

99. Cada uno de los restantes seis (6) encasillados tiene una grafica de barra para que compare sus resultados con los de los demás... (Señal)

100. Para determinar el rango de su grafica de barra para sus restantes seis puntuajes, estudie este ejemplo... La puntuacion para el encasillado del numero romano I, es seis (6). Este numero seis tambien puede encontrarse en el numero total de puntuaciones en el lado izquierdo de la hoja de contestaciones. Dibujando una flecha desde el seis (6) hasta la grafica de barra sobre el numeral romano I, conectamos una seccion de la grafica de barra con la letra B en ella. (Señal)

101. De la misma forma usted puede encontrar la seccion y la letra que corresponda a cada uno de sus seis (6) encasillados. Ahora proceda a marcar sus puntuaciones... Bip... Si cualquier numero parece caer entre dos secciones, use los de arriba... (Señal)

102. Luego que halla descuberto sus seis (6) codigos de contraste de letras, transfiera cada letra al circulo en blanco apropiado en la parte superior de su hoja de contestaciones. Hay un circulo en blanco para cada uno de sus seis codigos en letras... Bip... (Señal)

103. Codigos de tipo A representan las areas de su mas fuerte interes... Tome algun tiempo ahora y estudie las ocupaciones y los campos de estudio bajo estos codigos de tipo A... Bip... (Señal)

104. Enfoque su atencion de nuevo en al pantalla... Las personas que trabajan en ocupaciones enlistadas en cada columna tienen intereses de carreras similares. Su personalidad vocacional queda sugerida por la agrupacion o "Cluster" de nombres dado

a cada grupo de trabajadores. En la mayoria de los casos, usted encontrara que su personalidad vocacional es una combinacion de mas de una agrupacion...Bip...(Señal)

105. Vuelva su hoja de contestaciones al lado I...En la parte superior de su hoja de contestaciones...Encuentre los seis encasillados mostrados en este ejemplo...Esto es una escala para ayudarle a determinar la consistencia de sus selecciones para retratos repetidos en la encuesta...(Señal)
106. Compare sus respuestas con los retratos (5) y (71)...¿Son sus respuestas iguales o son diferentes?...(Señal).
107. Si son iguales, coloque una marca (✓) dentro de los cuadrantes (5) y (71)...Si sus respuestas son diferentes, deje los cuadrantes en blanco...(Señal)
108. En cada lado de los restantes cinco (5) cuadrantes, estan los numeros de los retratos que usted debe marcar en la misma manera...Bip...Mientras menos marcas (✓)...Mayor la ~~confiabilidad~~ del resultado de su examen...(Señal)
109. CREDITOS

APPENDIX C

The enclosed printed answer sheets are the English and Spanish versions of the answer sheets thus far prepared for the Comparative Career Search vocational interest test.

માર્ગદાર

CONTRAST CODES

TOTAL SCORE

--

Scotte

OCCUPATIONS

503

TOTAL SCORE

卷之三

FIELDS OF STUDY

NOMBRE

FECHA

SEXO GRADO EDAD CONOADO

ESCUELA

BUSQUEDA DE CARRERAS POR COMPARACION—COMPARATIVE CAREER SEARCH PARA COMPLETAR ESTA ENCUESTA SE NECESITAN:

UN PROYECTOR DE PELICULAS, UNA PANTALLA,
UNA GRABADORA Y LA HOJA DE CONTESTACIONES.

INSTRUCCIONES: Esciba su nombre, la fecha su sexo grado, edad condado y su escuela

(señal) Esto es una encuesta para ayudarlo a descubrir aquellos trabajos que más le interesan. Su hoja de contestaciones contiene setenta y dos (72) espacios donde usted marcará su respuesta (señal)

La película muestra personas en sus trabajos. Dos de las fotografías son de personas ejecutando diferentes trabajos. Los dibujos contiguos son guías de las tareas que llevan a cabo (señal)

Durante la encuesta se le pedirá que indique su preferencia entre los dibujos y las fotos superiores—tituladas A o la pareja inferior—tituladas B (señal)

ENCASILLADO DE
EJEMPLO

X	A	B	?
Y	A	B	?
Z	A	B	?

Luego marcará aquella contestación que muestra la alternativa de trabajo que usted prefiere—es decir A o B. Si no puede oír oír oscurezca el espacio de la respuesta (?) (señal)

Los retratos muestran personas trabajando. Su selección—A o B—no debe estar influenciada por el sexo de las personas en los retratos, si no por el trabajo que realizan (señal)

En el lado izquierdo de la hoja de contestaciones hay un encasillado de ejemplo. En unos momentos estará usted usando este encasillado de ejemplo para indicar su preferencia entre los tres retratos de muestra (señal)

Recuerde si usted prefiere el tipo de trabajo mostrado en A oscurezca el espacio de respuesta debajo de la letra A. Si prefiere el tipo de trabajo mostrado en B, oscurezca el espacio de respuesta B. Si no, puede decidir oscurezca el espacio (?) Marque solamente una respuesta por cada retrato. Usted tendrá alrededor de 10 segundos para marcar su elección por cada uno de los siguientes tres retratos (señal)

¿Tiene alguna pregunta? Si tiene alguna duda o si el sonido hasta que su pregunta sea contestada. Si no hay preguntas comience a marcar sus respuestas en los próximos 72 retratos. Asegúrese de que el número mostrado en el retrato es igual al número de respuesta que usted está marcando en su hoja de contestaciones (señal)

Comience

NO HAGA MARCAS EN ESTE ENCASILLADO									
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

5	71
13	69
21	67
6	72
14	70
-22	68

Use Lapiz Solamente—No Use Boligrafo
Asegúrese De Que Cada Marca Esta Oscurecida Y Que Llena El Encasillado Completely

Copyright © 1981
Indiana Department of Public
Instruction All rights reserved

Borre Completely Cualquier Error



